

**WE CLAIM:**

1. In the connection of two pipe segments via welding operations, wherein the two pipes segments have fiberglass linings, a method for reducing the transfer of heat from said welding operations to said fiberglass linings comprising:

5 coupling a first end of a weld shield device to a first pipe segment of said two pipe segments, wherein said weld shield device includes an insulation material and a sleeve body;

coupling a second pipe segment of said two pipe segments to a second end of said weld shield device, wherein said sleeve body creates a welding gap between said two pipe segments, and wherein said weld shield device at least partially occupies a cutout portion of said fiberglass linings; and

welding the two pipe segments together at said welding gap, said insulation material reducing heat from transferring from said welding operations to said fiberglass linings.

2. The method of Claim 1, wherein grooves on opposite ends of said weld shield device mates with ends of fiberglass liners of said two pipe segments.

15 3. The method of Claim 2, wherein said sleeve body includes short necks which fit around said fiberglass liners.

4. The method of Claim 2, wherein said insulation material covers the entire length of an outside portion of said weld shield device.

5. The method of Claim 3, wherein said fiberglass lining is maintained in place using adhesive material, and wherein said weld shield device includes long necks which axially

extend into said two pipe segments past said mating surface between said fiberglass liners and said sleeve body in a cutout portion of said adhesive material.

6. The method of Claim 1, further comprising the step of:

removing a portion of said fiberglass liners from said two pipe segments prior to said coupling steps to create said cutout portion of said fiberglass liners, said cutout portion of said fiberglass liners having a complimentary profile to an outer profile of said weld shield device.

7. The method of Claim 1, further comprising the step of:

providing two pipe segments having a removed portion of said fiberglass liners which is complimentary to an outer profile of said weld shield device prior to said coupling steps.

8. A weld shield device arranged and designed to facilitate the end-to-end connection of two pipe segments having fiberglass liners during welding operations, wherein said weld shield device is arranged and designed to at least partially occupy a cutout portion of said fiberglass liners comprising:

a sleeve body arranged and designed to couple with said fiberglass liners, wherein said sleeve body in coupling with said fiberglass liners of said two pipe segments has a length such that a welding gap is created between said two pipe segments, and

insulation material is coupled to said sleeve body, wherein said insulation material reduces heat from being transferred from said welding operations to said fiberglass liners.

9. The weld shield device of Claim 8, wherein said weld shield device includes short necks which extend radially inwardly of the end of said liners.

10. The weld shield device of Claim 9, wherein said insulation material covers the entire length of an outside portion of the weld shield device.

11. The weld shield device of claim 9, wherein said outside portion includes long necks which extend axially inwardly into a cutout portion of adhesive material of said two pipe segments, each of said necks extending past a mating surface between said fiberglass liners and a groove of said sleeve body in a cutout portion of adhesive material of said pipe segments.

12. A weld shield device arranged and designed to facilitate end-to-end connection of two pipe segments having fiberglass liners during welding operations, wherein said weld shield device is arranged and designed to at least partially occupy a cutout portion of said fiberglass liners comprising:

a sleeve body having a complimentary profile to fiberglass cutout portions of said two pipe segments, wherein said sleeve body is arranged and designed to couple with said fiberglass liners at a mating surface, wherein said sleeve body includes short necks which fit around the ends of said liners, and wherein said sleeve body in coupling with said fiberglass liners of said two pipe segments has a length such that a welding gap is created between said two pipe segments, and

an insulation material coupled to said sleeve body, wherein said insulation material covers the entire length of an outside end of the weld shield device, and wherein said insulation material reduces heat from being transferred from said welding operations to said fiberglass liners.

13. The weld shield device of Claim 12, wherein

said fiberglass lining is maintained in place using adhesive material, and wherein

said weld shield device includes long necks which axially extend into said two pipe segments past said mating surface between said fiberglass liners and said sleeve body in a cutout portion of said adhesive material.

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